nondiscriminatory access to loop qualification information if it should consider developing additional (or improved) methods for itself or third parties. Second, it provides AT&T a nondiscriminatory opportunity to participate in Verizon's planning and implementation of such processes. This, in turn, will assure that AT&T receives information about and an opportunity to participate in such decisions, which is necessary to assure that Verizon will not develop discriminatory processes in the future. Third, consistent with Verizon's general obligation to provide uniform OSS throughout its region, AT&T's proposed language assures that AT&T will not have to incur multiple sets of costs to develop multiple systems or processes to access Verizon's loop data.

Q. SHOULD VERIZON BE PERMITTED TO REQUIRE AT&T TO PRE-QUALIFY A LOOP WHEN IT ENGAGES IN LINE SPLITTING?[224]

A. No. The purposes of pre-qualification are to determine whether a loop is capable of providing a DSL service and to assure that the addition of a DSL service to a loop will not affect the voice service on the underlying low frequency spectrum ("LFS") when Verizon provides the voice service. Thus, although AT&T does not object to a pre-qualification requirement when it engages in line sharing (and Verizon is the provider of the voice service),[225] in line splitting Verizon will not

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224 AT&T's statement of Issues III.10.B.5&5.a is:

III.10.B.5. May Verizon require AT&T to pre-qualify a loop for xDSL functionality?

III.10.B.5.a. If AT&T elects not to pre-qualify a loop and the loop is not currently being used to provide services in the HFS, but was previously used to provide a service in the HFS, should Verizon be liable if the loop fails to meet the operating parameter of a qualified loop?

225 *See* AT&T's § 1.3.1.

be responsible to an end user customer for the provision of *either* the voice *or* the DSL service over the loop. Therefore, a requesting carrier should have the right to decide whether or not to pre-qualify a loop and the means it chooses to do so, as long as that carrier informs Verizon of the type of DSL service it will be providing over the loop.[226]

Sections 1.3.2&3 of AT&T's proposed contractual language addresses these issues. In particular, § 1.3.2 provides that AT&T may, at its option, decide whether to make use of Verizon's loop qualification information in connection with line splitting, using the same pre-ordering interface used for UNE-P orders that do not involve line splitting. Section 1.3.3 expressly provides that Verizon may not reject an order for line splitting simply because AT&T has not pre-qualified the loop using Verizon procedures. In addition, Verizon should make pre-ordering information available to AT&T that informs AT&T whether the loop was previously pre-qualified or conditioned by or on behalf of any other carrier. In such cases, Verizon should be responsible for the performance of that loop, whether or not AT&T pre-qualified the loop, because the loop has previously been subject to the necessary pre-qualification and/or conditioning. On the other hand, if AT&T does not pre-qualify a loop that was not pre-qualified or conditioned, § 1.3.3 recognizes that AT&T should bear the risk of that decision.

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226 AT&T recognizes that it is appropriate to provide such information, so that Verizon can perform its spectrum management functions on the binder group. *See* § AT&T's 1.4 ("AT&T shall provide Verizon with the information required by FCC Rules regarding the type of xDSL technology that it deploys on each loop facility employed in Line Sharing or Line Splitting"). This language provides more (and clearer) detail regarding how this information should be provided than Verizon's language in its proposed § 11.2.17.3.

In these circumstances, AT&T will not hold Verizon responsible for service performance of the HFS unless AT&T subsequently qualifies the loop.

Contrary to Verizon's claim,[227] the language of § 1.3.3 is not inconsistent. Rather, it fairly balances the rights and interests of both parties without requiring AT&T to engage in the sometimes lengthy and expensive pre-qualification process, *e.g.*, an Engineering Query. Moreover, Verizon agrees that there are indeed certain circumstances when AT&T should not be required to engage in a loop qualification at all, *i.e.*, for "a loop that has already been pre-qualified for the *same* advanced data service in the same time period (*i.e.*, the loop has been in continuous use for the same service)."[228] AT&T, however, does not believe there is any reason why Verizon should require AT&T to incur the expense of pre-qualifying loops using Verizon's procedures if AT&T is prepared to employ alternatives means and/or is willing to bear the reasonable consequences of relying on its own capabilities. Contrary to Verizon's claim, such a provision will not impose any injury or significant "inefficiency" on Verizon, because it will not face any liability in such cases and, with line splitting, the customer does not (and should not) perceive that Verizon is providing any aspect of the service.[229]

The unreasonableness of Verizon's position is made clear in its responses to AT&T's Discovery Requests 3-39, 42, 44 and 45, dated July 18, 2001. First, Verizon acknowledges that its mechanized loop qualification procedure is "based

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227 *See* SSUI at 95.

228 *Id.* (Emphasis in original).

229 *Id.* at 95-96.

on the average length as determined by MLT of a sample of loops at each terminal *and does not pre-qualify a specific loop*."[230] Nevertheless Verizon would appear to require AT&T to employ its loop qualification procedures—even if AT&T would otherwise use an alternative qualification procedure that addresses the *specific* loop for which the customer seeks service. The only reasonable bases for this requirement by Verizon -- none of which are valid here -- are the following:

1. The qualification tool used by AT&T is substantially less than 98% (the accuracy rate asserted for the Verizon procedure in its response to DR 3-39). False rejects should be of equivalent level; however, Verizon has not even attempted to quantify these errors with respect to its own procedure or take them into account (which is also confirmed by DR 3-39); or
2. The same or substantially similar electrical characteristics are not identified (*e.g.*, presence of DAML/DLC, presence of interferers, and electrical length of the loop).[231]

Neither of these deficiencies exists in the alternative methodology that AT&T might employ yet Verizon absolutely refuses to accept orders unless the Verizon pre-qualification is employed.[232]

Verizon's opposition is unsustainable, especially since (i) Verizon does not provide any advice in the pre-qualification procedure as to whether or not the

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230 Verizon Response to DR 3-39 (emphasis added).

231 *See* Verizon Response to DRs 3-39 & 3-44(A).

232 Verizon Response to DR 3-47.

carrier will be successful in delivering its DSL capability;[233] (ii) Verizon does not return any information that AT&T could not obtain through its own separate qualification procedure;[234] (iii) the ordering (rather than the pre-qualification) procedure provides the essential spectrum management information; and (iv) the AT&T tool provides equivalent accuracy of qualification for the specific loop rather than for a sample. In light of these facts, Verizon's only possible remaining justification for requiring use of its qualification tool is that it wants to be able to charge for this information.[235] That is clearly an insufficient basis under the circumstances.

Q. SHOULD AT&T (OR ITS AUTHORIZED AGENT), AT ITS OPTION, BE PERMITTED TO PLACE SPLITTER FUNCTIONALITY IN VIRTUAL, COMMON (*a.k.a.* SHARED CAGELESS) OR TRADITIONAL CAGED PHYSICAL COLLOCATIONS?[236]

A. Yes. However, Verizon appears to have mistaken AT&T's position in this regard.[237] Section 1.5 of Schedule 11.2.17 merely provides that AT&T may deploy a splitter in any type of collocation that it has established in a Verizon central office. It does *not* give (or seek to give) AT&T the additional right to select the particular place in the Verizon office where the collocation will be located. In fact, consistent with AT&T's proposed language, Verizon

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233 *See* Verizon Response to DR 3-44(B).

234 *Id.*

235 *See* Verizon Response to DR 3-47.

236 *See* Issue III.10.B.6.

237 *See* SSUI at 96.

acknowledges "AT&T has the option of placing splitter equipment in their own collocation space."[238]

Q. UNDER WHAT CONDITIONS SHOULD THE AGREEMENT REQUIRE VERIZON TO DEPLOY SPLITTERS ON A LINE-AT-A-TIME BASIS AS AN ADDITIONAL FUNCTIONALITY OF THE LOOP?[239]

A. Again it appears that Verizon has either not read or has misread AT&T's contract language on this issue. Section 1.6 of Schedule 11.2.17 states as follows:

> Notwithstanding the foregoing [provisions of § 1.5 on the placement of AT&T-owned splitters], Verizon shall offer to provide AT&T with access to Verizon-owned splitters, on a line-at-a-time basis, and AT&T shall have the right to request Verizon provide such attached Loop electronics in a central office on 90 days notice. Once such splitters are deployed, Verizon will provision AT&T's orders for Line Sharing or Line Splitting using such Verizon-provided splitters within the intervals described herein. If Verizon declines to provide such capability to AT&T, it will implement such capability within 45 days of an FCC order requiring ILECs generally to do so. If the Parties are unable to reach agreement regarding the implementation of such obligations, either Party may subject the issue to Dispute Resolution as provided in Section 28.11 of this Agreement.

Contrary to Verizon's assertion,[240] AT&T is not asking "the Commission to require Verizon to purchase and install splitters." Rather, the provision seeks Verizon's *voluntary agreement* to provide splitters, pursuant to § 252(a)(1). In the alternative, this provision states that if Verizon refuses to do so (as appears to be the case), then Verizon "will implement such capability within 45 days of an FCC order requiring ILECs generally to do so." Given the history of this issue, AT&T's proposal is reasonable.

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238 *See* Verizon Response to DR 3-49.

239 *See* Issue III.10.B.7.

First, an order in this proceeding requiring Verizon to provide splitters on a line-at-a-time basis would be consistent with the Act and the Commission's implementing rules and orders and fully supported by the law and the facts. There is no question that the Commission, sitting as arbitrator, has the legal authority to require Verizon to provide splitters in this manner in Virginia, and that doing so would be in the public interest, as several states have already held. For example, in Texas, the arbitrators ruled:

> "[The Arbitrators] agree with AT&T that it is purchasing all of the loop including the low and high frequency spectrum portion of the loop when it purchases the unbundled loop in combination with the switch port or UNE-P. As noted by AT&T, in the FCC's Line Sharing Order the FCC defined the high frequency loop as a capability of the loop. In order to gain access to the high frequency portion of the UNE loop, line splitting is required. Such line splitting is accomplished by means of passive electronic equipment referred to as splitter.
>
> Although, as noted by SWBT, the FCC has to date, not required ILECs to provide the splitter in either a line sharing or line splitting context, the Arbitrators believe this Commission has the authority to do so on this record. *The FCC has clearly stated that its requirements are the minimum necessary and that state commissions are free to establish additional requirements, beyond those established by the FCC, where consistent. Indeed, in the SWBT Texas 271 Order, the FCC acknowledged that line splitting, a recent development, would be subject to potential arbitration before the Texas Commission.*[241]

The Texas Commission upheld this award, stating:

> "The Commission . . .finds it appropriate to conclude that the splitter is to be included in the definition of the local loop . . . excluding the splitter from the definition of the loop would limit its functionality . . . agrees with

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240 SSUI at 99.

241 *Petition of SWBT for Arbitration with AT&T Communications, TCG and Teleport Communications Pursuant to Sec. 252(b)(1) of the Federal Telecommunications Act of 1996,* Docket No. 22315, Revised Arbitration Award, dated September 27, 2000, at 18-19. (Emphasis added).

> the Arbitrators' conclusion that "there is no technical distinction between line sharing and line splitting, as the splitter provides access to the same functionality of the loop in both contexts. Consequently the Commission finds that it is discriminatory for SWBT to provide access to the splitter in a line sharing context while not providing the splitter in a line splitting context."[242]

Other state commissions, including those in Indiana and Wisconsin, have similarly determined that ILECs must provide for line splitting with ILEC-owned splitters.[243] For example, the Indiana Commission required Ameritech to provide splitters as follows:

> [T]he Act provides for dual oversight of telecommunications providers through both federal and state regulatory agencies. Specifically, the Act endowed the FCC with specific authority and grants the state regulatory agencies additional authority to impose requirements on ILECs that are consistent with the requirements of the Act. *Accordingly, in viewing the relevant FCC orders with respect to this issue, we do so with the knowledge that the order of this Commission is not limited by the action of the FCC so long as our action is consistent with the Act of Congress*, 47 U.S.C. ¶251(d) and 261. On this issue, we exercise our authority to order action consistent with the intent of the Act, and recognize the high and low frequency aspects of a copper line as separate UNEs which Ameritech must provide without respect to whether it is providing high or low frequency service directly to the end user...

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242 *Petition of SWBT for Arbitration with AT&T Communications, TCG and Teleport Communications Pursuant to Sec. 252(b)(1) of the Federal Telecommunications Act of 1996,* Docket No. 22315, Order Approving Revised Arbitration Award, dated March 14, 2001, at 7.

243 *AT&T Communications Of Indiana, Inc., TCG Indianapolis Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Indiana Bell Telephone Company, Incorporated d/b/a Ameritech Indiana pursuant to Section 252(b) of the Telecommunications Act of 1996,* Cause No. 40571-INT-03, Indiana Utility Regulatory Commission Order; *Petition for Arbitration to Establish an Interconnection Agreement Between Two AT&T Subsidiaries ("Indiana Order")* at 67-68; *AT&T Communications of Wisconsin, Inc. and TCG Milwaukee, and Wisconsin Bell, Inc. (d/b/a/ Ameritech Wisconsin)*, Docket 05-MA-120, Public Service Commission of Wisconsin Arbitration Award (Oct. 12, 2000) at 77-80.

> *We find that line splitting encourages entrants into the local exchange market, furthers competition within the local market and is consistent with the provisions of the Act.* Line splitting will allow data LECs to compete for the [high frequency loop spectrum] of all capable lines, rather than only those lines in which voice service is provided by Ameritech.
>
> The Commission therefore finds that the [high frequency loop spectrum] is a loop functionality and that the high frequency capacity is a capability of the loop. We further find that a splitter is considered ancillary equipment that allows access to that functionality. *A splitter shall be provided as ancillary equipment when requested to allow AT&T access to the [HFS].*[244]

Second, even if the Commission does not choose to rule on this issue in the context of this arbitration, it has twice promised to rule on the issue "expeditiously" in the last fifteen months if such an option is clearly not permitted by the text of the Commission order.[245] Given the fact that several states have already disposed of the issue—requiring incumbents to provide splitters on a line at a time basis—it is important that the Commission act soon and establish a national requirement. Assuming that it does take such action, there is no reason why AT&T should be required to submit to additional, and potentially protracted proceedings to implement this requirement in the agreement now being arbitrated. Therefore, AT&T's provision should be adopted.

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244 *AT&T Communications of Indiana, Inc., TCG Indianapolis Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Indiana Bell Telephone Company, Incorporated d/b/a Ameritech Indiana pursuant to Section 252(b) of the Telecommunications Act of 1996,* Cause No. 40571-INT-03, Indiana Utility Regulatory Commission Order (Nov. 20, 2000) at 67-68.

245 *Texas 271 Order* ¶ 328; *Line Sharing Reconsideration Order* ¶ 25.

Q. SHOULD VERIZON BE REQUIRED TO PERFORM CROSS-CONNECTION WIRING AT THE DIRECTION OF AT&T (OR ITS AUTHORIZED AGENT), INCLUDING CLEC-TO-CLEC CROSS-CONNECTIONS, REGARDLESS OF WHO DEPLOYS A SPLITTER OR WHERE IT IS DEPLOYED IN A LINE SHARING OR LINE SPLITTING ARRANGEMENT?[246]

A. AT&T's proposed § 1.11.2 provides:

> Verizon will permit collocation-to-collocation connections between AT&T and other carriers' collocation space, regardless of the carrier owning the collocation, provided only that the two collocation sites are in the same Verizon Central Office building. AT&T shall have the option to request that Verizon provide the cross-connecting facility or to provide and install the facility itself. Such cross-connecting facilities may either be copper or fiber, at AT&T's choice, and Verizon shall not require the use of equipment or additional cross-connection points between the two collocation locations except those that may be necessary to assure proper operation of the connection.

Although Verizon objected to this proposed language on legal grounds,[247] it notes that it has agreed to provide CLEC-to-CLEC cross connections pending the Commission's ruling on the remand of its collocation requirements. The Commission has now issued that ruling, and the Press Release summarizing it[248] states that the Commission will require incumbents to "provision cross-connections between collocated carriers, and . . . to provide such cross-connects on reasonable request." As a result, the basic issue is now resolved. However, since the Press Release indicates that the Commission has apparently determined that competitive carriers are not permitted to construct and maintain cross-

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246 Issue III.10.B.8.

247 *See* SSUI at 97-99.

connects, AT&T is prepared to modify the above language to remove its "option" to do so if such an option is clearly not permitted by the text of the Commission order. Nevertheless, the language is necessary to establish a clear obligation on Verizon.

Q. MUST VERIZON ALLOW AT&T TO COLLOCATE PACKET SWITCHES IN COLLOCATION SPACE?[249]

A. Yes. This issue is covered in AT&T's § 1.11.3:

> Verizon will permit and will not restrict AT&T's right to collocate equipment that performs packet switching or contains packet switching as one function of multi-function equipment, provided only that the equipment conforms to the minimum NEBS safety standards applicable to other equipment that may be collocated.

This matter also appears to have been resolved in the Commission's recent order. According to the Press Release, the Commission has generally approved the collocation of switching and routing equipment (other than "traditional circuit switches"). Therefore, AT&T's proposed language should be fully consistent with the Commission's new rules. To the extent that the text of the recent Commission Order provides further insight regarding the implementation obligations in this are, AT&T will be prepared to propose and support appropriate modifications which should be fully considered in this arbitration.

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248 "FCC Approves Rules Designed to Give New Entrants Access to Incumbent Local Phone Companies' Networks," July 12, 2001.

249 Issue III.10.B.10.

Q. WHAT INTERVAL SHOULD BE ADOPTED FOR COLLOCATION AUGMENTATION?[250]

A. AT&T's proposed contract language at § 1.3.6 requires Verizon to implement requests for collocation augmentation within 30 days of an accurate application for such augmentation. Verizon states that the parties "are still negotiating this issue and may be able to reach an agreement."[251] Under such circumstances, I would merely note here that it should take Verizon substantially less time to implement augmentations to existing collocations than to implement orders for new collocations.[252] Just as Verizon did, AT&T reserves the right to supplement its testimony (including the submission of oral testimony at any hearings) in the event the parties cannot reach agreement on this issue.

Q. WHY SHOULD THE COMMISSION ACCEPT AT&T'S PROPOSED CONTRACT PROVISION LIMITING VERIZON'S ABILITY TO IMPOSE CERTAIN MANDATORY COLLOCATION REQUIREMENTS ON CLECS THAT WISH TO ENGAGE IN LINE SHARING OR LINE SPLITTING?[253]

A. AT&T's proposed § 1.11.1 prohibits Verizon from requiring AT&T to connect the unbundled loop and switching elements in collocation, except in cases where

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250 Issue III.10.B.12.

251 *See* SSUI at 97.

252 This is precisely the reasoning behind the Pennsylvania finding that it should only take thirty days (30) for collocation augmentation for the cabling required for line sharing. *Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic-Pennsylvania, Inc., Implementing the Line Sharing Unbundled Network Element, A-310696F0002, and Petition of Rhythms Links, Inc. for an Expedited Arbitration Award Implementing Line Sharing, A-310698F0002,* Opinion and Order, (Nov. 15, 2001) at 17. ("For the foregoing reasons, based upon the record before us, we shall direct that the cable augmentation interval for existing collocation arrangements shall be thirty (30) business days.")

253 Issue III.10.B.15.

the splitter necessary to separate the high and low frequency signals on a loop that is located in an AT&T collocation.[254] This provision merely provides that Verizon may not require AT&T to use its own facilities unless it is technically necessary to do so. Moreover, this change has no material effect on the provisioning of DSL over copper-only loops. However, it could lead to significant problems assuming that AT&T is entitled to obtain access to entire loops for the provisioning of DSL service in an NGDLC architecture.

Q. WHY SHOULD THE REMAINDER OF AT&T'S PROPOSED CONTRACT LANGUAGE BE ADOPTED?

A. As discussed above, AT&T's contract language generally provides more clarity and precision than Verizon's and reduces the likelihood of disagreements in the future resulting from the ambiguities present in Verizon's proposed contract provisions. For example, unlike Verizon's proposed section 11.2.17, AT&T's § 1.1.1, consistent with the *Line Sharing Reconsideration Order,*[255] defines the loop facility eligible for line sharing without reference to "copper" facilities. With respect to the testing of line sharing equipment, AT&T's § 1.7.3, in contrast to Verizon's § 11.2.17.5.3, clarifies that Verizon may deploy its own test heads, but it must do so at its own expense. Similarly, AT&T's § 1.8. (and related subsections) provides additional operational and financial detail regarding the handling of troubles on customer lines that are used in line sharing and line

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254 *See* Verizon Proposed Contract § 11.2.17.4.

255 *Line Sharing Reconsideration Order* ¶¶ 10-13 (clarifying that the requirement to support line sharing applies to the "entire loop" not merely to copper facilities).

splitting compared to Verizon's §11.2.17.9. Accordingly, all of AT&T's proposed contract language on line sharing and line splitting should be adopted.

ISSUE V.6 Under what terms and conditions must Verizon provide AT&T with access to local loops when Verizon deploys Next Generation Digital Loop Carrier (NGDLC) loop architecture?

Q. WHAT IS AT&T'S POSITION REGARDING VERIZON'S OBLIGATION TO PROVIDE UNBUNDLED ACCESS TO NGDLC LOOPS?

A. Because the Commission has defined loops as a *functionality*, not as specific *facilities*, Verizon should be required to provide AT&T unbundled access to all types of loops—including NGDLC loops.

Q. WHERE IS AT&T'S PROPOSED CONTRACT LANGUAGE RELATING TO NGDLC LOOPS?

A. That language may be found in Section 11.2 of AT&T's proposed interconnection agreement, which also incorporates Schedule 11.2 of that proposal.

Q. DOES VERIZON PROPOSE CONTRACT LANGUAGE FOR NGDLC LOOPS?

A. Generally, no. Instead, Verizon asserts that "it is unclear to Verizon precisely to what AT&T seeks access,"[256] and states that the Commission should not decide that issue here.[257] Indeed, it has sought to dismiss this issue from the arbitration, and it asserts that the issue should be decided in the pending rulemaking

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256 In light of the detailed two-page general definition of the loop AT&T has provided of the loop and its functionalities (*see* AT&T's Schedule 11.2, § 2.1) and the additional full page definition of NGDLC Loops (*id.*, § 2.4.6) this argument simply cannot be credited.

257 SSUI at 141.

addressing related issues.[258] Thus, there is no parallel language for the Commission to review here.

Q. WHY SHOULD THE COMMISSION ADOPT AT&T'S PROPOSED CONTRACT LANGUAGE ON NGDLC LOOPS?

A. In ongoing proceedings at this Commission, AT&T has presented both legal and factual evidence that support the CLECs' need for unbundled access to "entire loops," *i.e.*, the entire functionality that supports the transmission of telecommunications signals between a customer's premises and the serving ILEC central office. Those materials overwhelmingly demonstrate that CLECs are impaired in their ability to compete if they are not permitted to obtain access to the entire loop functionality, regardless of the manner in which an ILEC chooses to implement it. Specifically, AT&T's presentations to the Commission establish the CLECs' legal right to, and their practical need for, this critical functionality. Therefore, AT&T has proposed contract provisions that set forth, in appropriate detail, the contractual terms and conditions necessary to assure that Verizon fulfills its obligations in this key competition-affecting area. Given the fact that Verizon has sought to avoid this issue and has not submitted parallel language for the Commission's consideration, AT&T's language on these issues should be adopted.

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258 *Id.* at 144.

Q. WHAT LEGAL AND FACTUAL EVIDENCE ARE YOU REFERRING TO?

A. AT&T's filings with the Commission include the following, which I append hereto as attachments 3, 3A, 4, 5, and 6, and incorporate by reference. In addition, I adopt Mr. Joseph Riolo's declaration of October 12, 2000 as my own. Specifically, the appended materials include the following:

1. *AT&T's October 12, 2000 Comments in CC Dockets 98-147 and 96-98, pages 34-68, and the attached Declaration of Joseph Riolo of the same date* (Attachments 3 and 3A). These materials explain the technological changes that are underway in loop plant that hold new and significant implications for the development of competition. Specifically, they explain that NGDLC technology is being used to deploy additional electronics in remote terminals located between customer premises and ILEC central offices, which reduces the length of the copper facilities used to serve customers. This is important, because the ability of a loop to carry high frequency transmissions declines as the length of the copper loop segment increases. These materials also explain that the ongoing technology changes do not, have not and cannot change the basic functionality of the local loop, nor do they change CLECs' fundamental need for access to their customers through the use of unbundled loops. As a result, these materials demonstrate that the introduction of the new loop technology provides no legal or policy basis to modify the current definition of the local loop, which includes "attached electronics."

These materials further show that access to "spare copper" loops is not a viable substitute for access to the entire capability of an NGDLC loop to transmit both high and low frequency signals from an end user's premises to the ILEC's serving central office. Moreover, they demonstrate that it is virtually always infeasible for a CLEC to collocate at a remote terminal, both because there is no room to do so and because the economic and practical difficulties associated with collocation either at or near a remote terminal effectively preclude CLECs from offering competitive services of equal quality to the incumbent's service. In addition, they demonstrate that the Commission's rules regarding access to ILEC DSLAMs located in central offices — which perform solely multiplexing (and not packet switching) functions – cannot reasonably apply when the ILECs deploy DSLAM functionality in remote terminals.

2. *AT&T's November 14, 2000 Reply Comments in CC Dockets 98-147 and 96-98, pp. 39-81 (Attachment 4).* These materials amplify the October 12 comments and further show that implementation of NGDLC loop architecture does not change any of the fundamental legal and policy principles that guided the Commission in defining the local loop network element and does not alter CLECs' need to obtain access to all of their customers' telecommunications signals. They also show that, contrary to the ILECs' claims, there are significant incentives for the incumbents to continue deploying NGDLC Loops even if they are required to make them available as unbundled network elements. Further, they show that ILEC offers of access to spare copper and/or wholesale "broadband services" are not substitutes for access to the entire loop as an unbundled network elements and that failure to require unbundled access to entire loops will have a drastic impact on the prospects for competition of both advanced services and voice services.

Finally, they demonstrate that the Commission's definition of DSLAMs as part of the packet switching element is erroneous even under the Commission's own standards and must be changed, especially when the ILECs deploy DSLAM (*i.e.*, multiplexing) functionality in remote terminals.

3. *AT&T's February 27, 2001 Comments in CC Dockets 98-147 and 96-98 (Attachment5).* These comments provide further discussion of the issues discussed above. In particular, they explain that the introduction of fiber-fed loops attached to DLC systems housed in remote terminals do not change the fundamental nature of the loop element, which remains the quintessential monopoly bottleneck facility, again supporting the need for CLECs to be able to obtain access to "entire loops" as unbundled network elements. They also provided answers to several other technical questions the Commission asked, including the following:

(i) the fiber feeder between a remote terminal and an ILEC's central office is included in the definition of the loop;

(ii) the presence of fiber feeder does not change a loop into shared transport;

(iii) Central Office Terminals, Optical Concentration Devices and similar devices are the network end of the loop element; and

(iv) rules allowing CLECs the option of obtaining access to unbundled subloops, dark fiber or "all copper" loops do not displace CLECs' need (and right) to obtain access to an entire loop.

4. *AT&T's Reply Comments dated March 13, 2001 in CC Dockets 98-147 and 96-98 (Attachment 6).* These material show that the comments of other parties confirm the positions AT&T articulates and rebut claims presented by the ILECs who seek to limit new entrants' ability to compete by preventing them from accessing their monopoly loop plant when they deploy NGDLC loop architecture.

Q. WHY SHOULD THE COMMISSION ADOPT THE POSITIONS AT&T HAS ADVOCATED IN THIS PROCEEDING AND ADOPT AT&T'S PROPOSED CONTRACT PROVISIONS?

A. First, as noted above, the Commission, sitting as arbitrator, has the obligation to assure that the citizens of Virginia benefit from full, open and fair competition. Second, arbitrators in Texas, acting on virtually identical information, have issued a Arbitration Award that essentially adopts the positions AT&T supports here.[259] This provides a significant precedent for the Commission to follow in its role as arbitrator. Third, in all events, the Commission should be adopt an order on these issues in CC Dockets 98-147 and 96-98 in the near future, quite possibly during the expected pendency of this proceeding. Accordingly, in order to minimize the time between the issuance of the Commission's ruling and the implementation of that ruling, AT&T requests the Commission to arbitrate the contractual provisions relating to these important issues. In all events, given the pendency of these issues before the Commission and their competitive import, these issues should

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259 *Petition of IP Communications Corporation to Establish Expedited Public Utility Commission of Texas Oversight Concerning Line Sharing Issues,* Docket No. 22168 (July 13, 2001), pp. 61-99.

continue to be a part of this proceeding and should not be dismissed as Verizon has requested.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY AT THIS TIME?

A. Yes.

I, __C. Michael Pfau_____ hereby swear and affirm that the foregoing direct testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

Witness

State : New Jersey
County : Somerset

I, ___Patricia Perhac_____ do hereby swear and affirm that _____

__C. Michael Pfau_____ appeared before me this _18th_ day of July, 2001.

Signed:

PATRICIA A. PERHAC
NOTARY PUBLIC OF NEW JERSEY
Commission Expires 4/8/2002

Notary

Notary Qualification Expires:

[Stamp or Seal]

ITEM: AT&T 3-6

In response to Issue III-7, on page 83, Verizon states: "Verizon has developed ordering processes that apply industry-wide to facilitate ordering by all CLECs." With regards to this statement:

(A) Identify the ordering format standards that Verizon is referring to when discussing special access to UNE conversions in the context of Virginia.

(i) Are the ordering format standards in any way based upon the Access Service Request (ASR) standard;

(B) Does Verizon assert that its implementation of the ordering format(s) are referenced in or follow any industry-wide implementation standard beyond those developed by Verizon for its own use.

(C) Define the meaning of "industry-wide" as used in this response. Specifically:

(i) Is the phrase limited to how Verizon interacts with carriers in Virginia? More specifically, to the extent that the industry-wide process would appear to have different requirements to a carrier requesting a conversion in the former GTE territory in Virginia compared to a conversion of a circuit located elsewhere in Verizon's operating territory, identify all perceptible differences in requirement for that requesting carrier.

(ii) Is there any distinction with regards to the meaning of "industry-wide" when Verizon uses the term in conjunction with the ordering format(s) employed as compared to the ordering process(es) employed?

(D) Identify any carrier representative(s) who provided input with respect to the "industry" needs related to ordering conversions of special access to UNEs, the dates and means used to gather such input, and the most recent estimates of the number or proportion of special access circuits, in aggregate, that the companies supplying such input represent of the total number of circuits that the industry, within Virginia, might seek to convert from special access configurations to UNEs.

REPLY: Subject to its previously filed Objections and without waiver of same, Verizon Virginia states as follows:

(A) Verizon Virginia's response to Issue III-7 indicated that Verizon Virginia would not implement a specific ordering process for AT&T. Instead, Verizon's process for conversions of special access to loop-transport combinations applies to all CLECs, and does not rely on the ASR. While the ASR could be used to convert special access services to loop-transport combinations, its use would require multiple orders per circuit to accomplish such conversion. Disconnect order(s) would need to be submitted to disconnect the special access circuit, and new connect order(s) submitted to reestablish the circuit as a combination. Submitting and processing a large number of orders for thousands of circuits would tax the resources of the CLEC as well as the ILEC. (See also Reply to AT&T Data Request 3-19.) Therefore, in order to minimize the work effort involved in converting, Verizon developed a process whereby CLECs can submit multiple circuits for conversion on one data template spreadsheet. The data fields requested on the template are similar to ones contained on an ASR or appearing on a CLEC's bill

(i) Yes. Many fields in the data template are the same fields that would be required on an ASR.

(B) No.

(C) (i) In this case, the phrase "industry-wide" refers to all CLECs doing business in the former Bell Atlantic territory. A similar conversion process is available for all CLECs doing business in the former GTE portion of Virginia.

(ii) No

(D) Each conversion request is handled individually with each CLEC. Any input received was received during efforts to convert an individual CLEC's circuits to EELs.

VZ VA #89

Selected Verizon Responses to AT&T's Data Requests on Line Sharing and Line Splitting

Question	AT&T's Data Request	Verizon's Response
AT&T 3-28	When Verizon provisions a line sharing arrangement for a loop on which local voice service is already operating, must the existing retail service be interrupted in order to add service in the HF Spectrum? If no, please explain why not. If so, please provide a detailed response to the following: (A) Does the described or planned provisioning process involve any potential interruption of the customer's existing retail voice service when the additional service is added in the HFS of that loop? If not, please explain why not. If so, please provide a detailed response: (1) At what point in the provisioning process might or will the service be interrupted and why? (2) How long does Verizon expect such an interruption to last and what performance commitments will Verizon make re: to the maximum and average interruption of service? (B) If Verizon has measured the service interruption interval for line sharing configurations, please respond: (1) What is the mean duration of the service interruption? (2) What is the standard error of the estimate and # of observations used to calculate the mean duration? (3) Is the mean duration of the service interruption different for VADI and other carriers collectively? (i) If so, state the results for (a) and (b) above separately. (ii) If a separate evaluation of results for VADI and other carriers has not been made, explain how Verizon believes that it can demonstrate that it is operating in a non-discriminatory" manner.	A) There is a minor service interruption of the existing dial tone when a line is provisioned for line sharing. The interruption occurs when the final cross connection is made at the cable pair for the customer. The frame technician will double tap the dial tone at the appearance of the SWITCH to the line share splitter circuit. This cross connection is run to the POTS IN terminals at the frame and the frame technician verifies the dial tone returns to the corresponding LINE OUT terminal. A cross connect is then run to the cable pair for the customer where the dial tone is verified again. At this point, the frame technician will check the original circuit to make sure the line is not in use. If not in use, the original cross connection will be lifted and the new cross connection will be terminated. The interruption of service is the length of time it takes to un-wrap the original cross connect wires and terminate the wires from the LINE OUT terminals. 1) The interruption of the dial tone circuit takes place in the last step of the process. 2) The interruption of the dial tone circuit is estimated to be less than 1 minute and it is within normal procedures for handling dial tone service. B)(1) No measurements for the interval of service interruption are known to exist at this time. No mean duration can be calculated. 2) No study has been done so no information is available to answer this request. 3) The same procedures are used for all line sharing participants - intervals are the same. (i) N/A (ii) Verizon follows the same procedures for the provisioning of all line share lines regardless of the provider of the data signal. All procedures and steps to implement are the same.

Question	AT&T's Data Request	Verizon's Response
AT&T 3-39	What is the current accuracy rate of Verizon's loop pre qualification database for its operating territory, in Virginia? Specifically, how often does that database indicate a loop is qualified but it is later found not to be qualified when the technician attempts to provision an order? How often is a loop shown as not qualified and later is found *to* be DSL capable?	The pre-qualification process has been performed in wire centers representing 99.5% of the lines in the Virginia offices with Collo arrangements. Verizon's pre qualification database reflects the result of an electrical (MLT) determination of loop length (the accuracy of which has been determined to be greater than 98%) and the information is available to all CLECs on a non-discriminatory basis. Only on the fringes of xDSL reach would the possible 1-2% error make a difference in whether a loop was qualified or not. The CLEC always has the option of accepting the longer loop. The CLEC also has the option of receiving, on a pre-order basis, a Loop Make Up for the customer's facilities, if one exists in LFACs, or requesting that a manual qualification or engineering query be performed. The xDSL pre qualification process indicates whether the facilities to the terminal serving a particular address or telephone number have a certain length or if other factors are present (e.g., T-1 interferers, DLC, Load Coils, DAMLs) that may prevent deployment of a particular xDSL service. The mechanized pre qualification process is based on the average length as determined by MLT of a sample of loops at each terminal and does not pre-qualify a specific loop. Therefore, there may be occasions when an address or TN has been pre-qualified but it is determined during assignment or provisioning that the specific loop serving that address or TN can't support the service requested (False Positive). When this occurs, Verizon will perform a Line and Station transfer, if appropriate facilities are available. The majority of false positives may end up being shown as canceled dispatched orders. However, most of the orders cancelled are attributed to "no spare" conditions and based on experience, the number of false positives has never exceeded 1%. There is no process to measure frequency in which a loop is determined to be capable of supporting DSL subsequent to an initial "not qualified" response (False Negatives). Subsequent requests for qualification using the manual loop qualification or engineering query are not directly comparable to the number of requests that may have been disqualified using the mechanized pre qualification inquiry. In fact, the number of not qualified loops that end up in the manual qualification category is relatively small since only in rare cases (such as end customer insistence) would a CLEC pursue a manual qualification if the loop is originally returned by the mechanized pre qualification process as not qualified

Question	AT&T's Data Request	Verizon's Response
AT&T 3-34	What level of flow through (defined as the proportion of line splitting provisioning orders that do not require human intervention from the point of successful submission by the requesting CLEC to the point of dispatch of a CO technician to perform work) is projected for Verizon within Virginia? When is the 100% flow through planned to be made available to CLECs? If 100% flow-through is not anticipated, what are the reason(s) for the orders not processing without human intervention?	Verizon is unable presently to project the level of flow through for the provisioning of line splitting orders in Virginia. Flow through provisioning may be available at some future point. Currently, Verizon has no information that would allow Verizon to prioritize the flow through of line splitting scenarios.
AT&T 3-42	Please state whether Verizon will require AT&T to perform a loop qualification query on each loop over which AT&T intends to provide a DSL service. If so, please state all reasons why Verizon believes such a requirement is necessary. (A) Would Verizon take a different position if AT&T agreed not to hold Verizon responsible for service problems when AT&T has not pre-qualified a loop and that loop had not been previously qualified by another carder to provide DSL service? If so, how would Verizon modify its response?	Yes. The loop qualification query is necessary to ensure that a loop is capable of supporting DSL and is free of DLC, loads, DAMLs and interferers, and to confirm that it is within loop length limitations recommended by industry standards. (A) No. CLECs make their own determination whether a DSL loop is capable of supporting their own DSL service offering. In some cases, regardless of loop characteristics, a CLEC will accept the loop and attempt to put DSL over the loop. Verizon recognizes that what one CLEC chooses to do with a loop with specific characteristics may not be what a second CLEC would choose to do with the same loop.